LIVE STOCK

Bots in Horses.

The veterinarians have not as yet been able to discover any method of dislodging bots after they have once succeeded in attaching themselves to the walls of a horse's stomach. Any treatment which will dislodge the bots will injure the horse. An Australian veterinarian, however, says the following will assist in reducing the number of bots: "Sulphate of iron, one ounce; sulphate of copper, one ounce; tartar emetic, one and one-half ounces; arsenic, one dram. This compound should be divided into twelve powders and one given in a mash of bran and chaff twice daily. On the fourteenth day, after the animal has been prepared with mashes, an aloetic physic ball of seven drams for a draft horse will require to be administered. Nourishing food should be given after the physic has acted, and the animal's condition improved as much as possible.

"During autumn, or the latter part of summer, when the bot fly lays its eggs on the chest, jaws, and knees of horses, a careful examination of all horses should be made, and if any of the white eggs are found adhering to the animal they should be clipped off, or removed by means of a solution of kerosene, hot water and soap, or an ointment of kerosene and lard rubbed on to the parts. The usual life of the bot in its parasitical stage, which is passed within the alimentary canal, is about six months, when it then passes out, and in due course develops into the fly."

Salt for Fattening Steers.

The value of salt in fattening steers has been studied and experimented with. It appears that it is needed for animals of this class as in the case of dairy cows. Only what will be understood as a reasonable supply ought to be given. It is remarked on this subject that "the heavy use of salt leads to a heavy consumption of water, thereby increasing the flow of urine—a result not desirable. An investigator along this line recommends one ounce of salt per day for a steer weighing 1,000 pounds at the beginning of the fattening period, and one and one-third of an ounce at the middle, and one and two-thirds at the close. The form of salt, granular or rock, is a matter of convenience with the stockman.

Money in Sheep Culture.

To stock a farm with sheep does not require a large amount of money, and the risk is small, as with proper care very few, if any, will die. Sheep on the farm will make the land more productive and profitable, with less labor and expenditure, than any other domestic animal. During the grazing season their droppings are more evenly distributed over the fields than keeping their yards and sheds thoroughly well littered a large quantity of the best fertilizing material can be obtained. Again, sheep are excellent weed exterminators, and they eat with a relish many varieties of weeds other animals will not touch. Every farmer should own a flock of sheep.

Cow Talk.

There is a great deal of loose language afloat on this cow question. Some men say, "pay no attention to breed; what we are after is actual performance in the cow." This is foolish talk, because a large problem in the cow question consists of a study how to breed—in other words—produce a good cow, says Hoard's Dairyman. The man who says pay no attention to breed is simply asking us to ignore all the thought and study and expense and effort that has been expended in the last thousand years, to breed a good cow.

HORTICULTURE

Spray Mixture for San Jose Scale.

The students of the third district state normal school at Cape Girardeau, Mo., under the instruction of Professor R. W. Clothier have begun a war of extermination upon the San Jose scale which abounds upon the fruit trees of that city and vicinity. The method used is a modification of the one used by the United States Department of Agriculture and many of the experiment stations in which a preparation of lime, sulphur and salt is used as the destroying solution. The solution used at the normal school is prepared as follows: Heat 15 to 20 gallons of water to boiling. Weigh out 20 pounds of sulphur and stir up to a paste with about 2 gallons of hot water. There should be no lumps of dry sulphur left floating in the water. Weigh out 40 pounds of good quick lime and place in a 50-gallon barrel. Pour over this as quickly as possible about 15 gallons of the boiling water. Immediately add the sulphur. Then at once sprinkle in about five pounds of crude caustic soda, 80 per cent to 90 per cent pure. Use gloves to protect the hands, and stir as much as possible with a hoe. The reaction is very violent and some times the mixture boils over the top of the barrel. Should this occur, or should the mixture solidify during the reaction, add more water. When the boiling ceases fill the barrel with either hot or cold water, strain through a brass or iron strainer, and spray upon the trees when in a dormant condition. This solution was sprayed upon 200 trees in March badly infected with scale with the result of complete extermination of the scale. Peach trees half in bloom were sprayed with this mixture without injury to blossom or fruit.

Foil Wooly Aphis.

The orchardists of South Africa have a way of double-working apple trees as a means of preventing the ravages of wooly aphis. It seems that seeds of Northern Spy apples or of some other so-called aphis-proof variety are planted to secure roots. Upon these are grafted scions of the same variety to give a stem base. A single selected bud is allowed to develop and after it has grown one year the desired variety is grafted on the stem produced by it. Some of our growers may be disposed to experiment with this theory. It is to be remembered that the Northern Spy apple tree produced by our method has in its roots an element of weakness from the standpoint of the believer in aphis-proof varieties and it seems quite likely that we might profit by experimenting in this line.

Keeping and Shipping Apples.

A series of experiments conducted at the Ontario, Canada, Agricultural college tend to confirm the conclusions reached by the United States Department of Agriculture that apples can be kept in better condition at a temperature of thirty-one degrees, Fahrenheit, than at a higher temperature. Both agree that a great advantage is gained by wrapping each apple in paper and carefully packing them in shallow one-bushel boxes.

Damage from Insects.

The damage done by insects in the orchard can never be figured out, for the reason that we are many times unable to tell just what it is that killed a tree. That the damage from borers, caterpillars and other insects is very large there is no doubt. Likewise the man that wages successful war on borers and their allies can never know how much damage to his orchard he has prevented.

AGRICULTURE

Artichokes.

Chemical analysis does not disclose any great amount of nutritive value possessed by the artichoke as an article of food for swine. The fact, however, that they will go the full length of their nose after them is instinctive evidence that the hog knows his business very nearly as well as his friend, the chemist. A great point in favor of artichokes over many other roots is the cheapness and ease with which they can be grown. They will grow anywhere and everywhere that other vegetation will grow, and when cultivated in good land will make an enormous yield of tubers per acre. And it is a mistake not to cultivate them, for while their tops will grow all right and make a dense growth, there will be no tubers and the plants at once become no more than a weed without some cultivation. The roots can be planted in fall or early spring, as with potatoes, and cultivated in the same way; and along in August and September the hogs should be turned in on them to do their own harvesting at will. A second crop can be grown on the same ground the next year without seeding, as sufficient roots will remain in the ground to seed the second crop. And if you have a little bottom field of sandy loam convenient to turn in on, it can be kept in artichokes permanently by cultivating each year and plowing up all the volunteer plants, between rows, in cultivating the crop.

Destroying Plant Lice.

One of our readers in Beresford, S. D., writes: "I am having considerable trouble with plant lice among my house plants. How can I get rid of them?"

A good may to kill lice on plants is to apply a tobacco wash in the form of a spray to the plants. Take a pound of tobacco stems, and steep in five gallons of water until the water takes on the color of strong tea. Strain and apply liquid to the upper and under sides of the leaves with a hand syringe. It may also be used as a preventive before the plant lice appear.

Another good plan is to syringe the plants with cold water, and while the foliage is wet sprinkle the plant all over with tobacco dust purchased from any tobacco store at a slight expense.—Farmers' Tribune.

Value of Barnyard Manure.

Barnyard manure not only supplies food for plants, but it enables the soil to retain more moisture. This is often a very important quality, and is never estimated by the chemist in comparing it with commercial fertilizer. It also seems that, while keeping the surface soil more moist, to also decrease the water deeper down, thus making the best possible condition for plant growth. Of course, when rough manure is plowed under the first effect is to dry out the surface, but this does not last long. When it is once thoroughly wet and settled this effect disappears. The first food of well-manured land may hold eighteen to twenty tons more of water per acre than the same soil unmanured.

Hardy Alfalfa.

Explorers of the Department of Agriculture have discovered in the Egyptian desert a hardy alfalfa which it is believed will prove drouth resistant and sturdy. The plant was found in the ruins of the ancient colony of Lambessa within the walls of the villa of Aesculapius, the famous healer, and enough seed was threshed out to start comprehensive experiments in the United States.

POULTRY

Rhode Island Reds.

According to what seems to be reliable testimony, the variety of fowls now commonly called Rhode Island Reds originated nearly fifty years ago. The late William Tripp of Little Compton is accredited with having bred the foundation stock.

Several interesting points are stated in a letter by Mr. George T. Howard of Little Compton, who writes as follows: "The Rhode Island Reds originated on the farm of William Tripp (now deceased). This man raised them for a good many years, and after a time other people around town got them. They were called the 'Bill Tripp' fowl. Finally someone from out of town, I think, came

through the town, bought up some of the best of them, and took them to some poultry show and called them Rhode Island Reds. I think they are a very good fowl for this climate, and am raising them altogether at present."

Mr. P. H. Wilbour, son of Isaac C. Wilbour, who was one of the veteran poultry raisers and handlers of Little Compton, writes: "A few years ago Miss Rebecca, daughter of William Tripp, informed me that a certain Dr. Aldrich came there and bought a few pullets and cockerels. He exhibited them, calling them Rhode Island Reds, and this is the first intimation that she had of the name (R. I. Reds). Dr. Aldrich is a Fall River man. To the best of my knowledge and belief the present Rhode Island Reds have existed about twenty or twenty-five years, and for at least ten years of that period were confined to Mr. Tripp's farm and the farms of such of his neighbors as obtained eggs or fowls from him, among the earliest of whom was my father, who for several years handled the bulk of Mr. Tripp's eggs and chickens, we setting a great many of the eggs and raising the pullets."

Poultry Notes.

One ration of corn a day does very well for laying hens.

Sell off the old hens and surplus cockrels.

The good layers are active and generally on the move.

The sooner the hens pass the moulting season the sooner they will begin laying.

Nests lined with tobacco leaves prevent all the trouble with lice.

Fowls compelled to hunt for a living too often hide their eggs from their owner.

The man who begins poultry keeping by making a big spread almost always comes to grief.

There is only one way to make pullets mature early, and that is to keep them growing.

If you want the poultry to be tender and juicy, let it be fattened quickly.

Eggs for hatching should not be over two weeks old nor subject to a temperature colder than 50 degrees.